Ordering number: EN 1281D

Monolithic Digital IC

NO.1281D

SANYO

LB1268

3-Channel, High-Current, Low-Saturation Driver Array

Features and Functions

- 3-channel magnet driver
- High current (2.0A max.) and low saturation voltage (1.5V)
- Parallel operation capability (channel 1 + 2)
- On-chip spark killer diodes

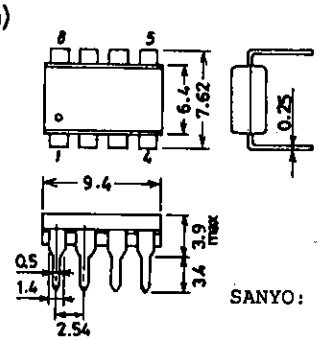
Absolute Maximum Ratings at Ta = 25°C

				unit
Maximum Supply Voltage	V_{CC} max		8.0	V
Output Supply Voltage	V_{OUT}		10.0	V
Input Supply Voltage	V_{IN}		12.0	V
Output Current	I_{OUT1}	ton≦50ms, duty = 20%, solenoid drive stage (ch1,2)	1.0	A
	I_{OUT2}	ton≦50ms, duty = 5%, motor drive stage (ch3)	2.5	A
Spark Killer Diode Forward Current	I_{FSM1}	t≦5ms, duty = 5%, solenoid drive stage (ch1,2)	1.0	A
	I_{FSM2}	t≦5ms, duty = 5%, motor drive stage (ch3)	2.5	A
V_{CC} Instantaneous Flow-Out Current	I_{CCP}	t≦5ms, duty = 5%,	3.0	A
GND Pin Flow-Out Current	I_{GND}	t≦5ms, duty = 20%,	3.0	A
Allowable Power Dissipation	Pd max		785	mW
Operating Temperature	Topr		–20 to +75	°C
Storage Temperature	Tstg		–40 to +125	°C

Allowable Operating Range at Ta = 25°C

				unit
Supply Voltage	V_{CC}		3.0 to 7.0	V
Input 'H'-Level Voltage	V_{IH}	I_{OUT} = 300mA	3.0 to 11.0	V
Input 'L'-Level Voltage	V_{IL}	I_{OUT} ≦ 100μA	–0.3 to +0.7	V

Package Dimensions 3001B-D8IC
(unit : mm)

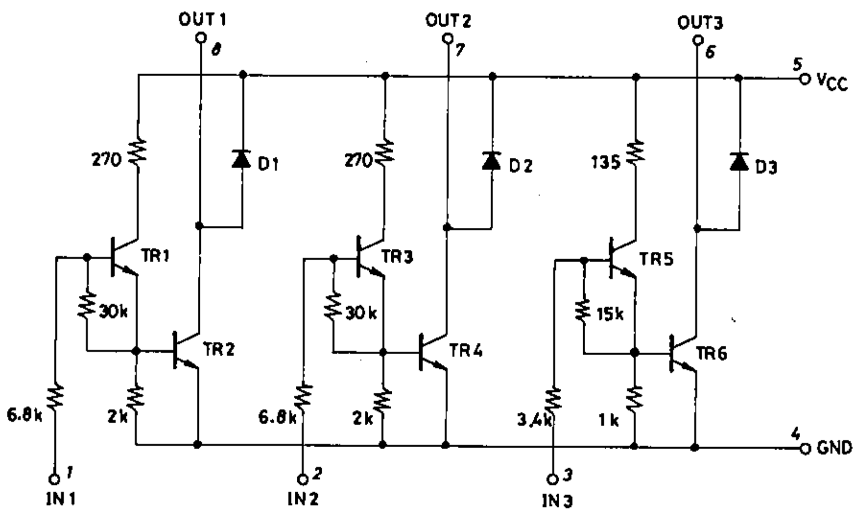


SANYO: DIP8

Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
Output Voltage	V_{OH1}	V_{IN}=4.5V, V_{CC}=5.0V, I_{OUT}=500mA (ch1,2)			0.65	V
	V_{OH2}	V_{IN}=6.0V, V_{CC}=7.0V, I_{OUT}=1000mA (ch1,2)			1.4	V
	V_{OH3}	V_{IN}=6.0V, V_{CC}=7.0V, I_{OUT}=1600mA (ch1,2 parallel)			1.4	V
	V_{OH4}	V_{IN}=3.0V, V_{CC}=3.0V, I_{OUT}=300mA (ch3)			0.25	V
	V_{OH5}	V_{IN}=4.5V, V_{CC}=5.0V, I_{OUT}=1000mA (ch3)		0.5	0.7	V
	V_{OH6}	V_{IN}=6.0V, V_{CC}=7.0V, I_{OUT}=2000mA (ch3)		1.0	1.5	V
Input Current	I_{IN1}	V_{IN}=6.0V (ch1,2)			1.0	mA
	I_{IN2}	V_{IN}=6.0V (ch3)			2.0	mA
Power Source + Output Leakage Current	I_{OFF}	V_{IN}=0.5V, V_{OUT}=V_{CC}=6.0V			30	μA
Spark Killer Diode Forward Voltage	V_{F1}	I_F=1000mA (ch1,2)			3.0	V
	V_{F2}	I_F=2000mA (ch3)			3.0	V
Output Sustain Voltage	$V_{O(sus)}$	I_{OUT}=400mA	10			V

Equivalent Circuit



Unit (resistance: Ω)

